

Claims

1. A door hinge with a holder for motor vehicle doors, wherein the door hinge comprises a pillar bracket attachable at a motor vehicle and a door bracket connectable with the motor vehicle door, the door bracket being pivotably linked to the pillar bracket by a hinge pin arranged in one bracket in an anti-rotational manner and rotatably arranged in the other bracket, said holder comprising a stop member carrier connected in an anti-rotational manner with said hinge pin and an engagement element supported so as to be rotatable together with the other bracket relative to said stop member carrier, said engagement element having at least one stop mark on a surface facing said stop member carrier, wherein at least one stop member biased by a spring element is arranged on said stop member carrier in such a way that it can be brought into engagement with the surface of said engagement element facing said stop member carrier,
characterized in that
said holder (2) has at least two spring biased stop members (7), wherein said spring element (9) presses at its ends against two neighboring or opposite stop members (7) arranged on said stop member carrier (8).
2. The door hinge according to claim 1, characterized in that said spring element (9) extends between opposite stop members (7) through corresponding bores (13) in hinge pin (5).
3. The door hinge according to claim 1 or 2, characterized in that said stop members (7) are biased by at least one other spring element (9) essentially extending parallel to said first spring element (9).
4. The door hinge according to any one or more of the preceding claims, characterized in that balls or cylindrical pins (7) of a circular diameter are provided as said stop members, which are able to be brought into engagement with an inside surface (26) of the engagement element configured as an engagement sleeve (6) and having at least one stop mark (24) formed corresponding to said balls or pins (7).

5. The door hinge according to any one or more of the preceding claims, characterized in that opposing stop members (7) can be brought into essentially synchronous engagement with corresponding stop marks (24) opposing each other on the inside surface (26) of said engagement sleeve (6).
6. The door hinge according to any one or more of the preceding claims, characterized in that said stop marks (24) are distributed on the inside surface (26) of said engagement sleeve (6) in such a way that said opposite stop members (7) can be brought into alternate engagement with said associated stop marks (24).
7. The door hinge according to any one or more of the preceding claims, characterized in that said stop member carrier (8) has correspondingly formed grooves (25) for guiding said stop members (7) and corresponding bores (10) for guiding said spring elements (9).
8. The door hinge according to any one or more of the preceding claims, characterized in that one or two pairs of said opposite stop members (7) are provided, which are biased by said spring elements (9) contacting said stop members (7) at their ends and extending through corresponding bores (10, 13) in said stop member carrier (8) and said hinge pin (5), and are formed by spiral springs (9).
9. The door hinge according to any one or more of the preceding claims, characterized in that said hinge pin (5), at its contacting surface with said stop member carrier (8), has at least one protrusion (14) which can be brought into engagement with a correspondingly formed groove (11) on said stop member carrier (8).
10. The door hinge according to any one or more of the preceding claims, characterized in that said hinge pin (5) is integrally formed with said stop member carrier (8).
11. The door hinge according to any one or more of the preceding claims, characterized in that said stop members (7), said engagement element (6)

and/or said stop member carrier (8) are hardened, preferably surface hardened in their contacting areas.